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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,671	07/23/2003	Michiei Nakamura	240706US0	6689
22850	7590	09/18/2006		
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CHU, HELEN OK	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b> 10/624,671	<b>Applicant(s)</b> NAKAMURA ET AL.	
	<b>Examiner</b> Helen O. Chu	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) -15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/23/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, drawn to an electrolyte composition for batteries drawn to class 429, subclass 309, in the reply filed on August 3 2006 is acknowledged. The traversal is on the ground(s) that Applicant submits that a search of all the claims would not impose a serious burden on the Office and that the Examiner has not given adequate reason or examples have been provided to support a conclusion of patentable distinctiveness between the identified groups. This is not found persuasive because the Examiner has provided sufficient reason for the distinction of invention. MPEP 806.05(f) states if the Examiner can prove that the product as claimed could be made by another and materially different process. Specifically the Applicant has admitted there are three independent processes used to make the product of Group I. Further, there is burden to the Examiner to prosecute the two Groups because the groups belong to different classes

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claim 15 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 7, 10, 13, 15 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. There are no spaces in between some words. Please revise.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

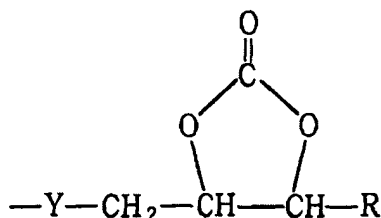
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 5, 8-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ventura et al. (US Patent 6,015,638).

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In regards to claims 1, 5, 11 and 12, the Ventura et al. reference discloses a liquid electrolytic film (Column 12, Lines 53-55) product with the following formula:



Where Y has the same structure as the above formula (Table 1 shows cross linked components) and R is hydrogen or an alkyl group (Column 4 and 5, Lines 60-67 and Lines 1-3 respectively).

In regards to claims 8, 9 and 10, the Ventura et al. reference teaches these plasticizers are formed from lithium or sodium salts (e.g. lithium thiocyanate) in diethyl carbonate solvent (Column 11, Lines 7-13).

In regards to claim 13, the Ventura et al. reference discloses an electrolytic film for a battery made of polyolefin (polypropylene) as a strengthening material (Column 12, Lines 53-59)

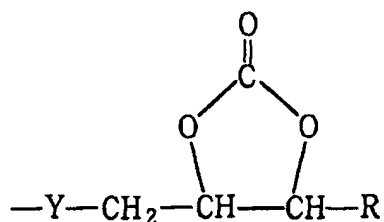
It is noted that claims 1, 2, 14 and 15 are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Since, the

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electrolyte product structure of Ventura et al. is similar to that of the Applicant's, Applicant's process is not given patentable weight in this claim.

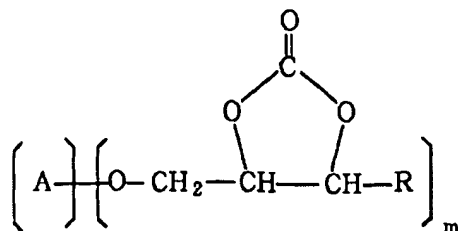
7. Claims 1-12, 14, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al (US Patent 6,949,317).

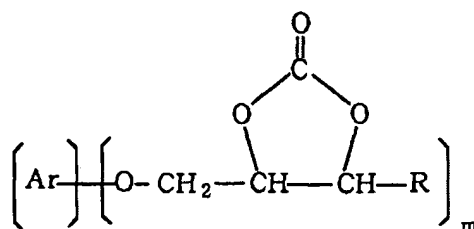
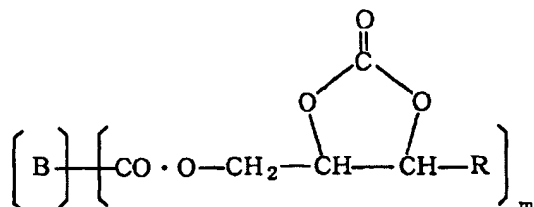
In regards to claims 1, 5, 11 and 12, the Yoshida et al. reference discloses a gel (wet) electrolytic film (Column 37, Lines 55-65) product with the following formula:



Where Y has the same structure as the above formula with a hydrogen R group (Column 7 shows cross linked components).

In regards to claims 2-4, 6 and 7, the Yoshida et al. reference discloses a glycidol derivative (Column 21, Line 15) that is cross linked with and epoxy group- bearing compounds with alcohol, carboxylic acid or phenol (Column 21, Lines 42-45). The Yoshida et al. reference teaches that the epoxy-bearing compound include a compound having two or more epoxy groups on the molecule. Acrylic acid (Column 9, Lines 47-51) or a glycidyl acrylate (Column 23, Lines 14-15) can also be added to the electrolyte. It is well known in the art if an electrolyte consist of compounds described above are mixed the product results in compounds with general formulas:





In regards to claims 8, 9 and 10, the Ventura et al. reference teaches electrolyte ammonium salts (e.g. lithium perchlorate) (Column 7, Lines 51-56) in a methyl ethyl carbonate solvent (Column 9, Line 11).

It is noted that claims 1, 2 and 14, 15 are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re

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Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Since, the electrolyte product structure of Yoshida et al. is similar to that of the Applicant's, Applicant's process is not given patentable weight in this claim.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen O. Chu whose telephone number is (571) 272-5162. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
PATRICK JOSEPH RYAN  
SUPERVISORY PATENT EXAMINER

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